UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

May 2, 2018 FedEx Tracking #: 7721 3778 9002

Ex. 6 Personal Privacy (PP)
Sunnyvale, CA 94085

Re: Indoor Air Sampling Results – No Evidence of Vapor Intrusion / No Further Sampling Recommended
Residential Building # 060 Ex. 6 Personal Privacy (PP) Sunnyvale, CA
Philips, Advanced Micro Devices 901-902, TRW Microwave Superfund Sites ("Triple Site")

Dea Ex. 6 Personal Privacy (PP)

Thank you for your cooperation and participation in the U.S. Environmental Protection Agency's (EPA) vapor intrusion indoor air sampling investigations in Sunnyvale, California. This letter confirms in writing the results of EPA's indoor air sampling for trichloroethene (TCE), conducted at your home in July 2015 and March 2016.

Your TCE Indoor Air Results: EPA considers TCE levels below 2.0 micrograms per cubic meter ($\mu g/m^3$) to be health protective and all of your sample results met this standard. Very low levels of TCE were detected in the air inside your home (up to 0.19 $\mu g/m^3$) and in the crawlspace beneath your building (up to 0.3 $\mu g/m^3$).

Your sampling results suggest that the potential for vapor intrusion at your building is low and EPA does not recommend any additional sampling. However, we will continue to provide you with periodic updates about our investigation.

While we did not find evidence of unacceptable TCE vapor intrusion in your home, your home is close to nearby homes and school buildings where higher levels of TCE were detected and where mitigation systems were installed to prevent TCE vapors from accumulating indoors. Therefore, out of an abundance of caution, we recommend that you contact EPA to re-evaluate and possibly re-test your home if any remodeling or significant renovations are conducted at the building in the future.

Certain types of renovations or structural changes can increase a building's likelihood of being affected by vapor intrusion. For example, sealing crawlspace vents may reduce fresh air flow into the home. Drilling holes through the floor for a new toilet or telephone/internet cable can create a new pathway for vapors to enter the home. We can schedule a quick visit with you to go over the plans and discuss whether another round of sampling or other response activities would be appropriate.

Background on EPA Investigation: EPA has been investigating the potential for vapor intrusion – a process where vapors from historic releases to groundwater may migrate inside buildings – in the E. Duane / San Miguel Avenue neighborhood.

Please be aware that your drinking water is not affected by contaminants in groundwater. Your water for drinking, bathing and watering gardens comes from the Hetch Hetchy Reservoir in the Sierra Nevada Mountains and is tested to ensure that it meets all state and federal drinking water standards.

Health Protection Goals: EPA's goal for Superfund site-related chemicals is to keep exposures as low as reasonably possible. EPA considers the safe range of TCE concentrations for residents to be below 2.0 micrograms per cubic meter ($\mu g/m^3$) (the short-term screening level). When an indoor air sample is collected and shows a concentration above the long-term screening level (0.48 $\mu g/m^3$) but below 2.0 $\mu g/m^3$, EPA uses this information to decide whether additional sampling or response actions are necessary, to confirm that levels continue to remain protective over time. More information about TCE can be found at this website: http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=172&tid=30

More About Your Results: All of the TCE results from your home met EPA's short-term health protective screening level (2.0 $\mu g/m^3$) and long-term health protective screening level (0.48 $\mu g/m^3$) for TCE.

One other compound that is not associated with the Triple Site was detected (perchloroethene or PCE) at very low concentrations up to 0.45 $\mu g/m^3$, below both the short-term screening level of 36.5 $\mu g/m^3$ and the long-term health protective screening level of 0.48 $\mu g/m^3$. The table below summarizes the sampling results for your home.

Sample Location	TCE Concentrations (micrograms per cubic meter or $\mu g/m^3$)				PCE Concentrations (micrograms per cubic meter or $\mu g/m^3$)			
	Jul-15 (24-Hr)	Jul-15 (14-Day)	Mar-16 (24-Hr)	Mar-16 (14-Day)	Jul-15 (24-Hr)	Jul-15 (14-Day)	Mar-16 (24-Hr)	Mar-16 (14-Day)
Indoor Air Sample (living room)	Not Detected	Not Detected	0.19	0.05	Not Detected	Not Detected	0.24	Not Detected
Crawlspace Air Sample (beneath bedroom)	Not Detected	Not Detected	0.3	0.06	Not Detected	Not Detected	0.2	Not Detected
Outdoor Air Sample (during your testing period)	Not Detected	Not Detected	Up to 0.33	0.07	Not Detected	Not Detected	Up to 0.21	Not Detected
Neighborhood Outdoor Air	Not-detectable to 1.7				Not-detectable to 0.46			
	(Range of neighborhood outdoor air samples since January 2015)							
EPA Screening Levels								
Short-term Screening Level	2.0				36.5			
Long-term Screening Level	0.48				0.48			

PCE and TCE belong to a chemical category called VOCs (volatile organic compounds) which are contained in products that may be commonly found around the home (such as silicone lubricants, spot removers, adhesives, wood cleaners and dry-cleaned clothing). Additionally, because PCE is not found in the groundwater beneath your neighborhood, and the PCE concentration detected in your indoor air samples is similar to the outdoor air concentrations of PCE measured in your neighborhood, it is likely that the low levels of PCE detected in your home are associated with typical outdoor concentrations of this chemical.

Outdoor Air Quality: Often, the air quality inside your building will be similar to outdoor air quality. In a vapor intrusion investigation, it is important to determine whether indoor air quality is linked to outdoor air quality or whether air inside the building is affected by vapor intrusion (VOC vapors rising from groundwater contamination under the building). When outdoor air enters a building through open windows or air conditioning/heating systems, particles or pollutants that are present outside will naturally be carried into the building. In urban areas, these pollutants typically come from cars, trucks, and industrial facilities and can vary over time. While outdoor air TCE levels have varied throughout the course of EPA's investigation, the outdoor air TCE levels measured during your testing periods were very low and did not interfere with your sampling results.

TCE Vapor Intrusion Findings: EPA considers it unlikely that your building is being affected by unacceptable vapor intrusion. The sampling results from your home showed no evidence of unacceptable vapor intrusion and we do not plan to perform any additional sampling at this time.

Next Steps: **We will continue to provide you with periodic updates about our investigation. Also, please contact EPA if any significant changes are planned to your property in the future.** If you have any questions, please contact me at (415) 972-3050 or by e-mail to morash.melanie@epa.gov. You may also contact EPA's Community Involvement Coordinator, Alejandro Diaz, who is fluent in Spanish, at (415) 972-3242 or by e-mail to diaz.alejandro@epa.gov.

Thank you for your cooperation in this air sampling investigation.

Sincerely,

Melanie Morash

Melanie Morash, EPA Project Manager